1. A method to induce angiogenesis in vivo, comprising administration of a composition comprising a pharmaceutically effective quantity of sphingosine-1-phosphate, its salts and derivatives, an analog of sphingosine-1-phsophate, its salts and derivatives, or a combination comprising at least one of one of the foregoing.

2. The method of claim 1, wherein the composition further comprises at least one additional positive angiogenic factor.

3. A method for treatment of tumors, rheumatoid arthritis, diabetic retinopathy, Kaposi's sarcoma, hemangioma, or psoriasis, comprising administration of a pharmaceutically effective quantity of antagonists of signal transduction of EDG-1 or EDG-3 or a combination thereof.

4. The method of claim 3, wherein the composition further comprises at least one additional anti-angiogenic factor.

5. A method to inhibit angiogenesis in vivo, comprising administration of a pharmaceutically effective quantity of at least one antisense oligonucleotide of an mRNA encoding an EDG protein receptor.

6. The method of claim 5, wherein the antisense oligonucleotide is a derivative or analog of natural oligonucleotides.

7. The method of claim 5, wherein the EDG protein receptor is EDG-1 or EDG-3, or a combination thereof.

8. The method of claim 5, wherein the antisense oligonucleotide is 5'-GAC GCT GGT GGG CCC CAT-3' (SEQ ID NO:1) or 5'-GCT GGT GGG CCC CAT GGT -3'(SEQ ID NO:2).

9. The method of claim 5, wherein the antisense oligonucleotide is a derivative or analog of SEQ ID NO:1 or SEQ ID NO:2.

10. The method of claim 5, wherein the antisense oligonucleotide is 5'-CGG GAG GGC AGT TGC CAT-3''(SEQ ID NO:5).

11. The method of claim 5, wherein the antisense oligonucleotide is a derivative or analog of SEQ ID NO:5.

12. A method for promoting endothelial cell growth and morphogenesis comprising treating cells with a bioactive substance that induces signal transduction by a G protein-coupled receptor in endothelial cells.

13. The method of claim 12, wherein said endothelial cells are vascular endothelial cells.

14. The method of claim 12, wherein said endothelial cells are cardiac endothelial cells.

15. The method of claim 12, wherein the G protein-coupled receptor is EDG-1, EDG-3, or a combination thereof.

16. The method of claim 12, wherein the bioactive substance is a lipid.

17. The method of claim 12, wherein the lipid is sphingosine-1-phosphate, its salts, or derivatives, an analog of sphingosine-1-phosphate, its salts or derivatives, or a combination comprising at least one of the foregoing.

18. A composition comprising an antisense oligonucleotide that inhibits in vivo expression of at least one EDG gene.

19. The composition of claim 18, wherein the oligonucleotide sequence is one or more of SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:5.

20. The method of claim 18, wherein the antisense oligonucleotide is a derivative or analog of SEQ ID NO:1, SEQ ID NO:2, or SEQ ID NO:5.

21. A method for protecting endothelial cells from apoptotic cell death, comprising administration of a pharmaceutically effective quantity of sphingosine-1-phosphate, its salts and derivatives, an analogs of sphingosine-1-phsophate, its alts and derivatives, or a combination comprising at least one of one of the foregoing.

22. The method of claim 21, wherein the composition further comprises at least one additional positive angiogenic factor.

23. A method for increasing at least one of the VE-cadherin, α-catenin, β-catenin, or γ-catenin at endothelial cell-cell junctions, comprising administration of a pharmaceutically effective quantity of sphingosine-1-phosphate, its salts and derivatives, an analog of sphingosine-1-phsophate, its salts and derivatives, or a combination comprising at least one of one of the foregoing.

24. The method of claim 23, wherein the composition further comprises at least one additional positive angiogenic factor.

25. A method for modulating vessel maturation, comprising administration of a pharmaceutically effective quantity of sphingosine-1-phosphate, its salts and derivatives, an analogs of sphingosine-1-phsophate, its salts and derivatives, or a combination comprising at least one of one of the foregoing.

26. The method of claim 25, wherein the composition further comprises at least one additional positive angiogenic factor.

27. A method for protecting endothelial cells from apoptotic cell death, comprising administration of a pharmaceutically effective quantity of sphingosine-1-phosphate, its salts and derivatives, an analogs of sphingosine-1-phsophate, its salts and derivatives, or a combination comprising at least one of one of the foregoing.

28. A method for protecting endothelial cells from apoptotic cell death, comprising administration of a pharmaceutically effective antisense oligonucleotide for EDG-1.

29. The method of claim 28, wherein the oligonucleotide is SEQ ID NO:1 or SEQ ID NO:2 or derivatives thereof.

30. The method of claim 28, wherein the composition further comprises at least one additional positive angiogenic factor.

31. A method to induce angiogenesis in vivo, comprising construction and administration of pCDNA plasmid vectors expressing one or more of EDG-1, EDG-3, or EDG-5 effective to overexpress one or more of EDG-1, EDG-3, or EDG-5 in the endothelial cells of the body.

32. A method to induce angiogenesis in vivo, comprising construction and administration of adenoviral vectors expressing one or more of EDG-1 or EDG-3 effective to overexpress EDG-1 or EDG-3in the endothelial cells of the body.

add A'

Add D1